

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Bruce McDugle)	Art Unit:	3617
Serial No.	10/726,465)	Examiner:	Edward Swinehart
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February 20, 2007

/Stephanie Brown/
Stephanie Brown

RESPONSE

Sir:

This is in response to the Office Action mailed this last November 20, 2006. A response is due today. It is believed that no fees are due at this time. However, if any fees are required that were not submitted at the time of filing of this Response on the PAIR system, please charge them to Deposit Account No. 08-3260.

Please amend the above identified application as follows:

In the Claims:

1. (original) A thruster adapted to be mounted at an operating location at a transom of a boat, having bottom and side wall sections having rear end portions adjacent to the transom and a water line at the transom, said thruster comprising:

- a) a central thrusting section which has a lengthwise axis and comprises a central housing that defines a through passageway and two oppositely positioned outer end portions, each of which defines an end opening;
- b) a propeller section positioned in said through passageway;
- c) two extension members that are positioned at opposite sides of the central housing, with each extension member having an inner end portion adjacent to a related one of said outer end portions of the central housing and extending outwardly therefrom, each extension member having a lower perimeter edge portion which is located so that with the thruster in an operating position, and with the boat being in a lateral thrust operating mode, the perimeter edge portions of the two extension members are below the water line of the boat, each extension member having a lower downwardly facing surface that defines a flow passageway at the downwardly facing surface, said flow passageway having an inner end flow passageway portion adjacent one of the end openings of the center housing;
- d) said thruster being configured and arranged, so that with the thruster located at the transom in its operating position:

- i) when the boat is traveling at a sufficient speed through the water to cause the water to separate from the transom and form a transom wake surface, the thruster is substantially clear of the water that is at the transom wake surface, and
- ii) when the thruster is operating and the boat is in a lateral thrust operating mode, the two extension members have their lower perimeter edge portions located so that as water flows by the lower perimeter edge portions and into one of the end openings of the center housing, ambient air is substantially prevented from being entrained in the water entering into the center housing.

- 2. (original) The thruster as recited in claim 1, wherein each end opening of the housing is defined by a surrounding rim, and at least a substantial portion of the perimeter edge portion of the extension member which is adjacent to that surrounding rim is below an upper portion of said surrounding rim.
- 3. (original) The thruster as recited in claim 2, wherein said substantial portion of the perimeter edge portion of each extension member is below the upper portion of the surrounding rim by a distance that is at least about one-half of a depth dimension of the end opening defined by the surrounding rim.
- 4. (original) The thruster as recited in claim 2, wherein said substantial portion of the perimeter edge portion of each extension member is below the upper portion of

the surrounding rim by a distance between about one-quarter to three-quarters of a depth dimension of the end opening defined by the surrounding rim.

5. (original) The thruster as recited in claim 1, wherein each end opening of the housing is defined by a surrounding rim defining the end opening, each of said end openings having a depth dimension, each extension member having an inner end portion adjacent to its related end opening, an outer end portion, and a length dimension from said inner end portion to the outer end portion, with a length dimension from said inner end portion to said outer end portion of the extension member being at least as great as the depth dimension of its related end opening.
6. (original) The thruster as recited in claim 5, wherein said length dimension is at least as great as one and one-half times said depth dimension.
7. (original) The thruster as recited in claim 1, wherein each end opening of the housing is defined by a surrounding rim having a depth dimension, each of said extension members having a maximum width dimension extending from one side of said extension member to the other side thereof, said maximum width dimension being at least about equal to or greater than the depth dimension of the end opening of the housing adjacent to that extension member.
8. (original) The thruster as recited in claim 1, wherein each of said extension members has its downwardly facing surface shaped so the flow passageway has a greater depth dimension at said inner end flow passageway portion and a lesser depth dimension at an outer end portion of said extension member.

9. (original) The thruster as recited in claim 8, wherein said flow passageway has an inward and upward slope to said inner end flow passageway portion.
10. (original) The thruster as recited in claim 9, wherein the downwardly facing surface of the extension member forms a hydro-dynamically contoured surface that is generally curved upwardly and inwardly to the opening of the housing.
11. (original) A thruster boat combination comprising:
- a) a boat comprising a hull having a water line, side walls, a bottom wall, and a transom, with said bottom wall comprising two wall sections which extend from side locations in a downward and laterally inward slant to a central juncture location of the two bottom wall sections, and with said transom meeting said bottom and side walls at bottom and side edge locations thereof, said boat having a thrust operating mode where the boat is stationary or is moving at a sufficiently low speed so that water remains adjacent to the transom;
 - b) a thruster which is mounted at the transom of the boat so as to provide lateral thrust, said thruster comprising:
 - i) a central thrusting section which has a lengthwise axis and comprises a central housing that defines a through passageway that is generally aligned with said lengthwise axis and has two oppositely positioned outer end portions, each of which defines an end opening;
 - ii) a propeller section positioned in said through passageway;
 - c) two extension members that are positioned at opposite sides of the central housing, with each extension member having an inner end portion adjacent to a related one of said outer end portions of the central housing and extending

outwardly therefrom, each extension member having a lower perimeter edge portion which is located so that with the thruster in an operating position and with the boat being in a lateral thrust operating mode, the perimeter edge portions of the two extension members are below the water line of the boat, each extension member having a lower downwardly facing surface that defines a flow passageway at the downwardly facing surface, said flow passageway having an inner end flow passageway portion adjacent one of the end openings of the central housing;

d) said thruster being configured and arranged, so that with the thruster located at the transom in its operating position:

i) when the boat is traveling at a sufficient speed through the water to cause the water to separate from the transom and form a transom wake surface, the thruster is substantially clear of the water that is at the transom wake surface, and

ii) when the thruster is operating and the boat is in a lateral thrust operating mode, the two extension members have their lower perimeter edge portions located so that as water flows by the lower perimeter edge portions and into one of the end openings of the center housing, ambient air is substantially prevented from being entrained in the water entering into the center housing.

12. (original) The combination as recited in claim 11, wherein a distance between outer end edges of the two extension members is no greater than about sixty percent

and no less than about twenty five percent of a distance between outer edge locations of the transom where the bottom and side walls meet.

13. (original) The combination as recited in claim 11, wherein a distance between outer end edges of the two extension members is no greater than about fifty percent and no less than about thirty percent of a distance between outer edge locations of the transom where the bottom and side walls meet.
14. (original) The combination as recited in claim 11, wherein a distance between outer end edges of the two extensions is no greater than about forty percent of a distance between outer edge locations of the transom where the bottom and side walls meet.
15. (original) The combination as recited in claim 11, wherein a distance between outer end edges of the two extension members is no less than about thirty percent of a distance between outer edge locations of the transom where the bottom and side walls meet.
16. (original) The combination as recited in claim 15, wherein a distance between outer end edges of the two extensions is no less than about forty percent of a distance between edge locations of the transom where the bottom and side walls meet.
17. (original) The combination as recited in claim 12, wherein each end opening of the housing is defined by a surrounding rim having a depth dimension, each of said extension members having a maximum width dimension extending from one side of said extension member to the other side thereof, said maximum width dimension being at least about equal to or greater than the depth dimension of the end opening of the housing adjacent to that extension member.

18. (original) The combination as recited in claim 17, wherein each of said extension members has its downwardly facing surface shaped so that the flow passageway has a greater depth dimension at said inner end flow passageway portion and a lesser depth dimension at an outer end portion of said extension member.
19. (original) The combination as recited in claim 12, wherein a substantial portion of the perimeter edge portion of each extension member is below an upper portion of a surrounding rim defining the end opening of the central housing by a distance that is at least about one-half of a depth dimension of the end opening defined by the surrounding rim.
20. (original) The combination as recited in claim 12, wherein each end opening of the housing is defined by a surrounding rim defining the end opening, each of said end openings have a depth dimension, each extension member having an inner end portion adjacent to its related end opening, an outer end portion, and a length dimension from said inner end portion to the outer end portion, with a length dimension from said inner end portion to said outer end portion of the extension member being at least as great as the depth dimension of its related end opening.
21. (original) The combination as recited in claim 20 wherein said length dimension from said inner end portion to said outer end portion of the extension member is at least as great as one and one-half times said depth dimension.
22. (original) The combination as recited in claim 15, wherein a length dimension of the central housing section of the thruster is between about nine percent to thirty

percent of a length dimension between outer edge locations of the transom where the side walls meet the bottom wall.

23. (original) The combination as recited in claim 15, wherein a length dimension of the central housing section of the thruster is no greater than about thirteen percent to about twenty percent of a length dimension between outer edge locations of the transom where the side walls meet the bottom wall.

24. (original) The combination as recited in claim 15, wherein a length dimension of the central housing section of the thruster is about nine percent to three-twentieths of a length dimension between outer edge locations of the transom where the side walls meet the bottom wall.

25. (original) The combination as recited in claim 11, wherein an upper portion of said center housing of the thruster is at a depth below the water line of the boat which is less than a distance equal to a vertical dimension of the end opening of the passageway of the central housing.

26. (original) The combination as recited in claim 25, wherein the upper portion of the center housing of the thruster is at or adjacent to the water line of the boat.

27. (original) The combination as recited in claim 11, wherein a vertical dimension of one of the end openings of the passageway of the central housing is no less than about two-thirds of a vertical distance between the water line and a lower portion of the transom of the boat.

28. (original) The combination as recited in claim 11, wherein a vertical dimension of one of the openings of the passageway of the central housing is no less than

about three-quarter of a vertical distance between the water line and a lower portion of the transom of the boat.

29. (original) The combination as recited in claim 11, wherein a vertical dimension of one of the openings of the passageway of the central housing is no less than about eighty-one percent of a vertical distance between the water line and a lower portion of the transom of the boat.

30. (original) A thruster adapted to be mounted to a boat at an operating location, said thruster comprising:

- a) a central thrusting section which has a lengthwise axis and comprises a central housing that defines a through passageway and two oppositely positioned outer end portions, each of which defines an end opening;
- b) a propeller section positioned in said through passageway;
- c) two extension members that are positioned at opposite sides of the central housing, with each extension member having an inner end portion adjacent to a related one of said outer end portions of the central housing and extending outwardly therefrom, each extension member having a lower perimeter edge portion which is located at an elevation lower than the end openings of the center housing, each extension member having a downwardly facing surface that defines a flow passageway at the downwardly facing surface, said flow passageway having an inner end flow passageway portion adjacent one of the end openings of the center housing;

- d) said thruster being configured and arranged, so that with the thruster located in an operating position with the thruster operating to provide a lateral thrust, the two extension members have their lower perimeter edge portions located so that as water flows by the lower perimeter edge portions and into one of the end openings of the center housing, ambient air is substantially prevented from being entrained in the water entering into the center housing.
31. (original) The thruster as recited in claim 30, wherein each end opening of the housing is defined by a surrounding rim, and at least a substantial portion of the perimeter edge portion of the extension member which is adjacent to that surrounding rim is below an uppermost portion of said surrounding rim by a distance between about one quarter to three quarters of a depth dimension of the end opening defined by the surrounding rim.
32. (original) The thruster as recited in claim 30, wherein each end opening of the housing is defined by a surrounding rim, and at least a substantial portion of the perimeter edge portion of the extension member which is adjacent to that surrounding rim is below an uppermost portion of said surrounding rim by a distance that is at least about one-half of a depth dimension of the end opening defined by the surrounding rim.
33. (original) The thruster as recited in claim 30, wherein each end opening of the housing is defined by a surrounding rim defining the end opening, each of said end openings having a depth dimension, each extension member having an inner end portion adjacent to its related end opening, an outer end portion, and a

length dimension from said inner end portion to the outer end portion, with a length dimension from said inner end portion to said outer end portion of the extension member being at least as great as the depth dimension of its related end opening.

34. (original) The thruster as recited in claim 33, wherein said length dimension is at least as great as one and one-half times said depth dimension.

35. (original) The thruster as recited in claim 30, wherein each end opening of the housing is defined by a surrounding rim having a depth dimension, each of said extension members having a maximum width dimension extending from one side of said extension member to the other side thereof, said maximum width dimension being at least about equal to or greater than the depth dimension of the end opening of the housing adjacent to that extension member.

36. (original) The thruster as recited in claim 30, wherein each of said extension members has its downwardly facing surface shaped to have a greater depth dimension at said inner end flow passageway portion and a lesser depth dimension at an outer end portion of said extension member.

37. (original) The thruster as recited in claim 36, wherein said flow passageway having an inward and upward slope to said inner end flow passageway portion.

38. (original) The thruster as recited in claim 37, wherein the downwardly facing surface of the extension member forms a hydro-dynamically contoured surface having a concave surface that is generally curved upwardly and inwardly to the opening of the housing.

39. (original) A method of providing lateral thrust in a boat comprising a hull having a water line, side walls, a bottom wall, and a transom, with said bottom wall comprising two wall sections which extend from side locations in a downward and laterally inward slant to a central juncture location of the two bottom wall sections, and with said transom meeting said bottom and side walls at bottom and side rear edge locations thereof, said boat having a lateral thrust operating mode where the boat is stationary or is moving at a sufficiently low speed so that water remains adjacent to the transom, and a higher speed operating where water separates from the transom to form a transom wake surface, said method comprising:

- a) providing a thruster by:
 - i) providing a central thrusting section which has a lengthwise axis and comprises a central housing that defines a through passageway that is generally aligned with said lengthwise axis and has two oppositely positioned outer end portions, each of which defines an end opening and a propeller section positioned in said through passageway;
 - ii) positioning two extension members at opposite sides of the central housing to form said thruster in a manner that each extension member has an inner end portion adjacent to a related one of said outer end portions of the central housing with the extension members extending outwardly therefrom, and each extension member having a lower perimeter edge portion,

- b) positioning the thruster with the two extension members in an operating position at the transom of the boat, so that the perimeter edge portions of the two extension members are below the water line of the boat, with each extension member having a downwardly facing surface that defines a flow passageway at the downwardly facing surface, and with said flow passageway having an inner end flow passageway portion adjacent one of the end openings of the central housing,
- c) operating the boat with the thruster positioned so that during a time period when the boat is in said lateral thrust operating mode to cause a lateral thrust, the two extension members are positioned so that their lower perimeter edge portions are located so that as water flows by one of the lower perimeter edge portions and into one of the end openings of the center housing, ambient air is substantially prevented from being entrained in the water entering into the central housing, and during a time period when the boat is operating during the higher velocity operating mode the thruster is substantially clear of the water that is at the transom wake surface.
40. (original) The method as recited in claim 39, further comprising providing each end opening of the housing defined by a surrounding rim, with at least a substantial portion of the perimeter edge portion of the extension member which is adjacent to that surrounding rim being below an uppermost portion of said surrounding rim.
41. (original) The method as recited in claim 40, wherein said substantial portion of the perimeter edge portion of each extension member is positioned below the upper

portion of the surrounding rim by a distance that is at least about one-half of a depth dimension of the end opening defined by the surrounding rim.

42. (original) The method as recited in claim 41, wherein said substantial portion of the perimeter edge portion of each extension member is positioned below the upper portion of the surrounding rim by a distance between about one-quarter to three-quarters of a depth dimension of the end opening defined by the surrounding rim.
43. (original) The method as recited in claim 39, wherein each end opening of the housing defined by a surrounding rim has a depth dimension, and each extension member has an inner end portion adjacent to its related end opening, an outer end portion, and a length dimension from said inner end portion to the outer end portion, said method further comprising providing said extension members and said central thrusting section so that a length dimension from said inner end portion to said outer end portion of the extension member is at least as great as the depth dimension of its related end opening.
44. (original) The method as recited in claim 43, wherein said extension members and said central thrusting section of said thruster are provided so that said length dimension is at least as great as one and one-half times said depth dimension.
45. (original) The method as recited in claim 39, wherein each end opening of the housing is defined by a surrounding rim having a depth dimension, each of said extension members having a maximum width dimension extending from one side of said extension member to the other side thereof, said maximum width dimension being at least about equal to or greater than the depth dimension of the end opening of the housing adjacent to that extension member.

46. (original) The method as recited in claim 39, wherein each of said extension members has its downwardly facing surface shaped so the flow passageway has a greater depth dimension at said inner end flow passageway portion and a lesser depth dimension at an outer end portion of said extension member.
47. (original) The method as recited in claim 46, wherein said flow passageway has an inward and upward slope to said inner end flow passageway portion.
48. (original) The method as recited in claim 39, wherein the downwardly facing surface of the extension member forms a hydro-dynamically contoured surface that is generally curved upwardly and inwardly to the opening of the housing.
49. (previously presented) A thruster adapted to be mounted to a boat at an operating location, said thruster comprising:
- a) a central thrusting section which has a lengthwise axis and comprises a central housing that defines a through passageway and two oppositely positioned outer end portions, each of which defines an end opening;
 - b) a propeller section positioned in said through passageway;
 - c) two extension members that are positioned at opposite sides of the central housing, with each extension member having an inner end portion adjacent to a related one of said outer end portions of the central housing and extending outwardly therefrom, each extension member having a lower perimeter edge portion which is located at an elevation lower than the upper portions of the end openings of the center housing, each extension member having a downwardly facing surface that defines a flow passageway at the downwardly facing surface, said flow passageway

having an inner end flow passageway portion adjacent one of the end openings of the center housing;

- d) each extension member having a perimeter flange connected to, and positioned around at least a substantial portion of the lower perimeter edge portion of the extension member, with the perimeter flange positioned with a substantial horizontal alignment component from the lower perimeter edge portion to extend into the surrounding water;
- e) said thruster being configured and arranged, so that with the thruster located in an operating position with the thruster operating to provide a lateral thrust, the two extension members have their lower perimeter edge portions located so that as water flows by the lower perimeter edge portions and into one of the end openings of the center housing, ambient air is substantially prevented from being entrained in the water entering into the center housing.

50. (previously presented) The thruster as recited in claim 49, wherein each end opening of the housing is defined by a surrounding rim, and at least a substantial portion of the perimeter edge portion of the extension member which is adjacent to that surrounding rim is below an uppermost portion of said surrounding rim by a distance between about one quarter to three quarters of a depth dimension of the end opening defined by the surrounding rim.

51. (previously presented) The thruster as recited in claim 49, wherein each end opening of the housing is defined by a surrounding rim, and at least a substantial portion of the perimeter edge portion of the extension member which is adjacent

to that surrounding rim is below an uppermost portion of said surrounding rim by a distance that is at least about one-half of a depth dimension of the end opening defined by the surrounding rim.

52. (previously presented) The thruster as recited in claim 49, wherein each end opening of the housing is defined by a surrounding rim defining the end opening, each of said end openings having a depth dimension, each extension member having an inner end portion adjacent to its related end opening, an outer end portion, and a length dimension from said inner end portion to the outer end portion, with a length dimension from said inner end portion to said outer end portion of the extension member being at least as great as the depth dimension of its related end opening.
53. (previously presented) The thruster as recited in claim 52, wherein said length dimension is at least as great as one and one-half times said depth dimension.
54. (previously presented) The thruster as recited in claim 49, wherein each end opening of the housing is defined by a surrounding rim having a depth dimension, each of said extension members having a maximum width dimension extending from one side of said extension member to the other side thereof, said maximum width dimension being at least about equal to or greater than the depth dimension of the end opening of the housing adjacent to that extension member.
55. (previously presented) The thruster as recited in claim 49, wherein each of said extension members has its downwardly facing surface shaped to have a greater depth dimension at said inner end flow passageway portion and a lesser depth dimension at an outer end portion of said extension member.

56. (previously presented) The thruster as recited in claim 49, wherein each end opening of the housing is defined by a surrounding rim, and at least a substantial portion of the perimeter edge portion of the extension member which is adjacent to that surrounding rim is below an upper portion of said surrounding rim.
57. (previously presented) The thruster as recited in claim 56, wherein said substantial portion of the perimeter edge portion of each extension member is below the upper portion of the surrounding rim by a distance that is at least about one-half of a depth dimension of the end opening defined by the surrounding rim.
58. (previously presented) The thruster as recited in claim 56, wherein said substantial portion of the perimeter edge portion of each extension member is below the upper portion of the surrounding rim by a distance between about one-quarter to three-quarters of a depth dimension of the end opening defined by the surrounding rim.
59. (previously presented) The thruster as recited in claim 49, wherein each end opening of the housing is defined by a surrounding rim defining the end opening, each of said end openings having a depth dimension, each extension member having an inner end portion adjacent to its related end opening, an outer end portion, and a length dimension from said inner end portion to the outer end portion, with a length dimension from said inner end portion to said outer end portion of the extension member being at least as great as the depth dimension of its related end opening.
60. (previously presented) The thruster as recited in claim 59, wherein said length dimension is at least as great as one and one-half times said depth dimension.

61. (previously presented) The thruster as recited in claim 49, wherein each end opening of the housing is defined by a surrounding rim having a depth dimension, each of said extension members having a maximum width dimension extending from one side of said extension member to the other side thereof, said maximum width dimension being at least about equal to or greater than the depth dimension of the end opening of the housing adjacent to that extension member.
62. (previously presented) The thruster as recited in claim 49, wherein each of said extension members has its downwardly facing surface shaped so the flow passageway has a greater depth dimension at said inner end flow passageway portion and a lesser depth dimension at an outer end portion of said extension member.
63. (previously presented) The thruster as recited in claim 62, wherein said flow passageway has an inward and upward slope to said inner end flow passageway portion.
64. (previously presented) The thruster as recited in claim 63, wherein the downwardly facing surface of the extension member forms a hydro-dynamically contoured surface that is generally curved upwardly and inwardly to the opening of the housing.

REMARKS

In the first office action, claims 1 through 48 were rejected. Claims 30 - 38 were rejected under 35 U.S.C. 102(b) as being anticipated by Applicant's disclosed Offer for Sale of the claimed invention. Then claims 1 - 29 and 39 - 48 were rejected under 35 U.S.C. 103(a) on the grounds of the Applicant's disclosed Offer for Sale considered as prior art in review of Den Oude. Reconsideration is requested.

With regard to the "on sale bar" this is discussed in the Manual of Patent Examining Procedure, § 2133.03 (b) "On Sale". For the convenience of the Examiner, the pertinent language is discussed below. Page 1, first paragraph:

... The on-sale bar of 35 U.S.C. 102(b) is triggered if the invention is both (1) the subject of a commercial offer for sale not primarily for experimental purposes and (2) ready for patenting, Pfaff v. Wells Elecs., Inc., 525 U.S. 55, 67, 48 USPQ2d 1641, 1646-47 (1998).

To put the case law in perspective as stated in the EZ Dock, Inc. v. Schafer Sys., Inc., case: "Before the Supreme Court's decision in Pfaff, this court used a multifactor, 'totality of the circumstances' test to enforce the on-sale bar." EZ Dock, Inc. v. Schafer Sys., Inc., 276 F.3d 1347, 1351 (Fed.Cir.2002).

Now with regard to the second prong of the above-noted test in Pfaff, the Supreme Court elaborated on two possible ways to satisfy this prong. Pfaff, 525 U.S. at 67, 119 S.Ct. 304. The Supreme Court explained that the second condition ready for

patenting "may be satisfied in at least two ways: by proof of reduction to practice before the critical date; or by proof that prior to the critical date the inventor had prepared drawings or other descriptions of the invention that were sufficiently specific to enable a person skilled in the art to practice the invention." *Id.* at 59, 119 S.Ct. 304.

I bring up this background to present a clearer picture of the legal framework for the present issues. I noted in the Examiner's response on page 4 that the Examiner cited the 1989 Federal Circuit case, *RCA Corp. v. Data Gen. Corp.*, and since that time, the legal landscape has changed somewhat due to the Supreme Court decision in *Pfaff*. To get a better visual of the prongs in their conjunctive and disjunctive nature in the hierarchical fashion, I attached herewith a quick visual map as Attachment A to provide a general gestalt of the issues.

Therefore, with an appreciation of how reduction to practice fits within the legal framework has one way of showing the second prong of the *Pfaff* case, there will now be a focused discussion upon the first necessary prong of the *Pfaff* case related to "the subject of a commercial's offer for sale not primarily for experimental purposes." Therefore, I would like to elaborate upon the fact pattern and legal holding within the *EZ Dock* case, which found the commercial sale to be experimental and thus not invoking the 35 USC 102(b) bar.

With the regard to *EZ Dock v. Schafer Systems*, at 276 F.3d 1347, this case cites *Pfaff*, which is noted above, and of course relies upon the two-prong test to determine if USC §102(b) is invoked. Of course, the *EZ Dock* case was in appeal from summary judgment; however, the court nonetheless did not find that the stipulated facts rose to the level of finding a statutory 102(b) on sale bar.

Before Pfaff, reduction to practice was a central focus of both the on-sale bar and experimental use negation thereof. See, e.g., *Seal-Flex, Inc. v. Athletic Track & Court Constr.*, 98 F.3d 1318, 1324, 40 USPQ2d 1450, 1454 (Fed.Cir.1996). The coincidence of reduction to practice as a focal point for both aspects brought a symmetry, and often a simplicity, to the analysis. As stated in the RCA Corp case, an invention could be the subject of an experimental use anytime up to reduction to practice. *RCA Corp. v. Data Gen. Corp.*, 887 F.2d 1056, 1061, 12 USPQ2d 1449, 1453 (Fed.Cir.1989).

Therefore, it can be appreciated that prior to EZ Dock and Pfaff, reduction to practice with the central focus; however, Pfaff changed the test for when an on-sale bar is triggered where the Supreme Court has positioned the factor of reduction to practice in the framework such as that shown in Attachment A.

With regard to the first prong of the Pfaff test, reference is made to the facts of the EZ Dock case, which are now listed below.

Facts Related to the First Prong of the Pfaff Test as Recited in EZ Dock Case

In general, the EZ Dock case related to molded dock sections coupled together with rubber male-type anchors. In this case, the following fact pattern was cited by the Federal Circuit:

After Schafer established its *prima facie* case that the '055 patent was invalid due to an on-sale bar, EZ Dock put forth evidence to negate that evidence by showing that its sale to Mr. Greden was experimental. When Mr. Greden

purchased his dock, EZ Dock was not yet selling any docks. Mr. Neitzke did not have a "for sale" sign, brochure, or any other markings to indicate that the docks he had in his office supply store were for sale. Rather, Mr. Greden initiated the purchase of the dock. Mr. Greden did not pay full market price for the dock. Moreover Mr. Neitzke added free equipment and free installation to the price he did charge Mr. Greden. This evidence creates a genuine issue regarding the factual support for whether the inventors offered their invention for a commercial sale under market conditions in accordance with the first part of the *Pfaff* test. *EZ Dock v. Schafer Systems*, at 276 F.3d 1347, 1353.

Therefore, the relevant facts in this case include the following: the buyer and not the inventors initiated the sale, the buyer did not pay full market price, the inventors provided installation and equipment for free, the inventors visited the buyer's premises on several occasions, the inventors made free repairs, there was a need to test the invention for durability under the conditions at the buyer's premises, and the inventors changed the feature of the embodiment sold to the buyer.

Now referring to the facts of the present case, it can be shown that the first prong of the *Pfaff* test has not been reached.

Analysis

Reference is now made to the attached Declaration of one of the co-inventors, Mr. Bruce McDugie. This attached Declaration was executed on September 6, 2006, by

Mr. McDugle, and there is also attached an earlier Declaration of Mr. McDugle signed on August 23, 2004.

In page of 3 of the attached latest McDugle Declaration of this September 6, 2006, Mr. McDugle made it very clear that if he had not entered into an arrangement such as with Mr. Murch (the purchaser), he would not have tried to engage in a commercial sale of this thruster what has yet to be designed and manufactured.

1. Purchaser Initiated Sale

Mr. McDugle also points out that he did not solicit a sale from Mr. Murch. Mr. Murch came to him and Mr. McDugle told Mr. Murch that he had had different ideas about how the thruster could be made to be compatible with boats with shallow draft, but he regarded these ideas as experimental and made that very clear to Mr. Murch.

2. Did Not Pay Full Price

Further, on pages 4 and 5, Mr. McDugle points out that he was also sticking his neck out financially in that he was obligated to do further design work if needed without receiving any compensation except for Mr. Murch paying for the out-of-pockets.

3. Inventor Followed up with Purchaser

The inventor made several calls to the purchaser thereafter, and as recited in paragraph 13 on page 11 of his Declaration on August 23, 2004, adjustments were made such as moving the thrust assembly upwardly two inches closer to the relative bottom surface of the stern. Further, other changes were noted to address the problem of water flowing upwardly in a curve around the rear surface of the thrust housing. Further modification was made for the lower concave surface of these extension

members in a more circular configuration 10 as shown in the attached figure of his Declaration. It should be noted that paragraph 13 of the inventor's Declaration relates to actions for a second prototype.

4. Inventor Had Sufficient Control

With regard to the general nature of control of the first prototype, as recited in the inventor's Declaration of August 23, 2004 in paragraph 12, the inventor stated on November 16, 2001 that he and Mr. Murch met at the Cap Sante Marine Ltd. place of business, where Mr. Murch, along with the inventor and another employee Cap Sante, Mr. Patterson, were in attendance when the inventor observed water passing under the thrust assembly and noticed it was adhering to the cylindrical housing, and at this point there was a modification made to the apparatus. Such activity indicates additional control and testing over the prototype, indicating experimental use.

As recited in the middle portion of paragraph 12 on page 10 of the inventor's Declaration, the inventor made several calls to Mr. Murch, attempting to contact him thereafter. After contact, additional modification was made with the motor portion of the apparatus.

5. Inventor Changed Design Based on Results

It should be noted that the applicant has changed the feature of the embodiment due to this testing, as recited in the seventh fact pattern in the EZ Dock case. One of the changed factors is a perimeter flange, which is shown in the top view in Fig. 4. Further, another change resulting from this experimental use was the position of the internal motor, which is now positioned in a more lateral orientation with respect to the main housing as shown in Fig. 3 (see the opener 104 to which a drive shaft is

positioned in the ANSI text on page 20, beginning at line 6). Of course, the applicant does not intend to limit the claims to such an orientation, but the point is that adjustment of the preferred embodiment was made directly related to the experimental use. Further, these changes from the original prototype manifested themselves by way of claims, albeit dependent claims.

Now let us turn our attention to the newly submitted claims 49 through 64. Claim 49 has substantially the same recitations as in the other parent claims, except that in paragraph d) of claim 49 it recites that each extension member has a perimeter flange connected to, and positioned around at least a substantial portion of a lower perimeter edge portion of the extension member, with the perimeter flange positioned with a substantial horizontal alignment component from the lower perimeter edge portion to extend into the surrounding water.

This relates to the perimeter flange 86. This is also discussed in page 13 of Mr. McDugle's earlier Declaration. Mr. McDugle points out that with that perimeter flange it made an improvement in the flow pattern of the water so that there was less pressure loss and less turbulence in the water entering the passageways defined by the extensions. He also points out that by observing the water flow the laterally extending perimeter flange would split the water flow in a manner so that the water above the flange would flow more easily over the extensions and the water below the flange would flow more evenly into the partial passage provided by the extensions.

At the bottom part of page 13, Mr. McDugle indicates that he is reasonably confident in saying that he increased the effect of thrust as a minimum by 50% and quite possibly as much as 100% over the first prototype. Although he does not have

precise measurements of this, this is based upon his observations of the ability to move the boat sideways, which would of course have a proportional relationship to the thrust provided by the thrust assembly.

Of course, the above-noted factors merely show fact patterns similar to the EZ Dock case, where of course other facts in the present case indicate that the general nature of the transaction as experimental.

As recited in the inventor's second Declaration of September 6, 2006, there was limited knowledge of the likelihood of success of the embodiment, and as noted in column 8, the motivation for the prototype was for experimentation.

Then on page 5 of the later McDugle Declaration, Mr. McDugle was also asked to clarify to the undersigned the question of whether he regarded the arrangement with Mr. Murch as an experimental arrangement or more commercial. Again, Mr. McDugle made it quite clear that "without a doubt my answer is that substantially my entire motivation was for the purpose of experimental and I believe this is very clear from my Declaration."

Conclusion Regarding the Overall Nature of the Facts

Further, regarding the general nature of the sale, it can be appreciated that the sale between Cap Sante (the assignee of the application) and the purchaser had a general fact pattern of a significant amount of modification, uncertainty in the design, changes to the design, a single sale without any additional sales until much later, selling to and working with an engineer purchaser who is generally more tolerant of a development process and other possible potential customers, and other factors noted

above and which can be appreciated through the nature of the various declarations. The whole nature of the 102(b) statutory bar is to prevent effectively extending the life of the patent where the inventor incurs many sales, makes a large profit off the patent and then files a patent to effectively extend the life of his limited monopoly. Taking a step back and looking at the facts in totality, it is clear that the inventor in this case was not seeking to extend the life of the patent, and that the overall theme and spirit of his actions were very experimental.

It is respectfully submitted that the claims of the application should be made allowable. However, if there are any matters which need clarification, or if there are any of these matters which the Examiner feels could be expedited by a telephone conference with the undersigned, such would be welcome. The Applicant's attorney can normally be reached at the telephone number set forth below.

Signed at Bellingham, County of Whatcom, State of Washington this February 20, 2007.

Respectfully submitted,
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date

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By proof that prior to the
critical date the inventor had
prepared drawings or other
descriptions of the invention
that were sufficiently specific
to enable a person skilled in
the art to practice the
invention